

REMARKS

Claim 1 has been amended, and claim 21 has been added. Therefore, claims 1-13, 15, 17, and 19-21 remain pending in this application.

The Examiner rejected claims 1-2, 6-7, 11, 13, 15, and 17, under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,621,857 (*Belotserkovsky*) in view of U.S. Patent No. 5,982,809 (*Liu*). The Applicants respectfully traverse the rejection. It is respectfully submitted that the pending claims are not obvious in view of the cited references.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. That is, there must be something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561 (Fed. Cir. 1986). In fact, the absence of a suggestion to combine is dispositive in an obviousness determination. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573 (Fed. Cir. 1997). The mere fact that the prior art can be combined or modified does not make the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990); M.P.E.P. § 2143.01. Third, there must be a reasonable expectation of success. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found

in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); M.P.E.P. § 2142. A recent Federal Circuit case emphasizes that, in an obviousness situation, the prior art must disclose each and every element of the claimed invention, and that any motivation to combine or modify the prior art must be based upon a suggestion in the prior art. *In re Lee*, 61 U.S.P.Q.2d 143 (Fed. Cir. 2002). Conclusory statements regarding common knowledge and common sense are insufficient to support a finding of obviousness. *Id.* at 1434-35.

In the instant case, the Examiner fails to meet all three criteria that are necessary to establish a *prima facie* case of obviousness. As an initial matter, combined references do not teach or suggest all of the claim features. Claim 6 is discussed first. Claim 6, which is directed to a spread spectrum communication system, calls for an analog to digital converter for converting said analog signal into a digital signal, the digital signal having a first data rate. The Examiner asserts that element 401 in *Belotserkovsky* teaches this claimed feature. Claim 6 further calls for a downconverter for downconverting the digital signal to a second signal having a second data rate, wherein the second data rate is lower than the first data rate. The Examiner, acknowledging that *Belotserkovsky* does not teach a "second data rate being lower than the first data rate via a downconverter," turns to *Liu* to supposedly supply this missing claimed feature.

In particular, the Examiner argues the missing claimed feature is supplied by the sampler 16 of *Liu*. According to the Examiner, the sampler 16 of *Liu* "decimates/downconverts" the oversampled signal. See page 3 of the Office Action. The Applicants respectfully disagree. Contrary to the Examiner's assertion, the sampler 16 does not "down-convert." Rather, as

explained in *Liu*, at col. 4, lines 42-44, the sampler 16 performs an analog to digital conversion to produce digital spread spectrum signals 40. The downconversion is performed by the down-converter 12 in *Liu*. Because *Liu* teaches that the A/D conversion is performed by the sampler 16 (*i.e.*, after the down-converter 12), this means that signal at the down-converter 12 is an analog signal. However, as noted, claim 6 calls for a down-converter that downconverts the digital signal provided from the A/D converter. In *Liu*, the down-conversion does not occur based on a received digital signal, which, in claim 6, is provided from the A/D converter. Thus, for at least this reason, claim 6, and its dependent claims, is allowable.

Moreover, for at least the same reason, claim 1, and claims depending therefrom, are allowable. Additionally, claim 13 is allowable because the cited references at least do not teach "a downconverter for downconverting the digital signal to a second signal having a second data rate, wherein the second data rate is lower than the first data rate." Moreover, claims depending from claim 13 are also allowable for at least this reason.

The pending claims are also allowable because the Examiner has failed to provide any suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. For example, the Examiner appears to suggest that the two references can be combined by merely replacing the derotator 403 (see Figure 4 of *Belotserkovsky*) with the downconverter 12/sampler 16 of *Liu*. The Examiner, however, fails to provide any teaching or motivation for making such a modification (*i.e.*, why the derotator 403 and the downconverter 16 would be interchangeable), particularly when the derotator 403 operates on digital signals

(provided by A/D 401), and the downconverter operates on analog signals. More notably, the Examiner's attention is directed to the position of the timing recovery block 402 in *Belotserkovsky* compared to the timing recovery block 28 in *Liu*. In *Belotserkovsky*, the output of the timing recovery block 402 is located at the input of the derotator 403, whereas, in *Liu*, the timing recovery block 28 is located at the output of the sampler 16 (which the Examiner suggests corresponds to the derotator 403). These fundamental incompatible differences in the cited references highlight some of the deficiencies in the Examiner's obviousness rejection, thereby also indicating that the Examiner has failed to meet the third criteria for establishing a *prima facie* case of obviousness, namely that there must be a reasonable expectation of success in the combined teachings. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In view of the reasons presented above, the Examiner has failed to carry the burden of establishing a *prima facie* case of obviousness.

Arguments with respect to other dependent claims have been noted. However, in view of the aforementioned arguments, these arguments are moot and therefore not specifically addressed. To the extent that characterizations of the prior art references or Applicants' claimed subject matter are not specifically addressed, it is to be understood that Applicants do not acquiesce to such characterization.

In light of the arguments presented above, Applicants respectfully assert that the pending claims are allowable. Accordingly, a Notice of Allowance is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Houston, Texas telephone number (713) 934-4064 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

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